In the Claims:

Please amend the Claims as follows:

(Currently Amended) A method for processing image data, comprising:
obtaining <u>formatted</u> image data;

automatically extracting meta-data from fields of the image data;

automatically processing the meta-data to identify a target object;

automatically processing-classifying and labeling medical volumetric features of the image data using a set of information-based directives corresponding to the identified target;

automatically measuring pertinent features of the image data to identify a target object in the image data and process the image data according to a specified protocol responsive to the directives; and

automatically generating one or more <u>composite</u> images of the target object <u>with</u> <u>corresponding labels and feature measurements</u> based on one or more of the directives; and

automatically storing the one or more generated images in a digital archive.

2. (Original) The method of claim 1, wherein the image data comprises DICOMformatted image data.

- 3. (Currently Amended) The method of claim 2, wherein automatically processing the image meta-data using a set of directives comprises processing meta-data in DICOM fields to identify the target object.
- 4. (Currently Amended) The method of claim 1, wherein automatically processing classifying and labeling medical volumetric features of the image data comprises segmenting the target object using processing parameters specified by one or more of the directives.
 - 5. (Currently Amended) An imaging system, comprising:

an image processing module for automatically processing meta-data to identify a target object, automatically classifying and labeling medical volumetric features of image data using a set of information-based directives corresponding to the identified target, and automatically measuring pertinent features of the image data according to a specified protocol responsive to the directives; automatically processing image data using a set of directives to identify a target object in the image data and process the image data according to a specified protocol; and

a rendering module for automatically generating one or more <u>composite</u> images of the target object <u>with corresponding labels and feature measurements</u> based on one or more of the directives; and

a digital archive for automatically storing the one or more generated images.

- 6. (Original) The system of claim 5, wherein the image data comprises DICOMformatted image data.
- 7. (Original) The system of claim 6, wherein the imaging processing module extracts and processes meta-data in DICOM fields of the image data to identify the target object.
- 8. (Original) The system of claim 5, wherein the image processing module directs a segmentation module to segment the target object using processing parameters specified by one or more of the directives.
- 9. (New) A computer-readable medium tangibly embodying a program of instructions executable by a computer to perform program steps for processing image data, the program steps comprising:

obtaining formatted image data;

automatically extracting meta-data from fields of the image data;

automatically processing the meta-data to identify a target object;

automatically classifying and labeling medical volumetric features of the image data using a set of information-based directives corresponding to the identified target;

automatically measuring pertinent features of the image data according to a specified protocol responsive to the directives;

automatically generating one or more composite images of the target object with corresponding labels and feature measurements based on one or more of the directives; and

automatically storing the one or more generated images in a digital archive.

- 10. (New) The computer-readable medium of Claim 9, wherein the image data comprises DICOM-formatted image data.
- 11. (New) The computer-readable medium of Claim 10, wherein automatically processing the meta-data comprises processing meta-data in DICOM fields to identify the target object.
- 12. (New) The computer-readable medium of Claim 9, wherein automatically classifying and labeling medical volumetric features of the image data comprises segmenting the target object using processing parameters specified by one or more of the directives.